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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,835	01/22/2004	Paul David Ringgenberg	990122U1D3C1D2USA	5850

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,835

Applicant(s)

RINGGENBERG ET AL. *sf*

Examiner

Giovanna M. Collins

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 187-221 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 187-202 and 206-216 is/are rejected.
- 7) ☐ Claim(s) 203-205 and 217-221 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040122.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the segmented tubing and wireline must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 187-192,194-197,199-202,206-208,212-214, and 216 are rejected under 35

U.S.C. 103(a) as being unpatentable over Schulz et al. (5,540,280) in view of Vaynshteyn (6,173,772).

Schulz discloses (see Fig. 1c) a formation test assembly positioned in a wellbore of the well, the formation test assembly including an internal chamber (18) divided into first and second portions by a fluid separation device (42) reciprocally and sealingly received in the chamber, the first chamber portion being in fluid communication with first intersected by the wellbore, and the second chamber portion being in fluid communication with a remote location. Schulz does not disclose the first chamber is in selective communication with the first zone or in communication with a second zone. Vaynshteyn teaches (see Fig. a tester with a first chamber in selective communication with a first and second zones. The tester allows the test to stay in one location to test two different zones. As it would be advantageous to test different zones without having to move the test string, it would be obvious to modify the test assembly disclosed by Schulz to be in selective fluid communication with first and second zones as taught by Vaynshteyn.

Referring to claim 188, Schulz discloses a sampler (see col. 14, lines 59-62).

Referring to claim 189, Schulz discloses the first chamber portion (18) has a greater volume than the sampler (400).

Referring to claims 190-191, Vaynshteyn teaches perforating guns (57,82) for perforating first and second zones (32,33).

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Referring to claim 192, Schulz discloses a fluid property sensor (see col. 16, line 56).

Referring to claim 194, Schulz disclose the fluid property sensed by the sensor if stored in the formation test assembly (see col. 16, lines 57-59).

Referring to claim 195, Schulz discloses the sensor is between a tester valve and a circulating valve (see col. 16, lines 41-64).

Referring to claim 196, Schulz does not disclose a fluid identification sensor. However, Schulz does disclose samples are taking to determine long term production characteristics (see col. 1, lines 11-20). As it would be advantageous to verify that the well contains fluids that are economically viable for long term production, it would be obvious to one of ordinary skill in the art to further modify Schulz to have a fluid identification sensor.

Referring to claim 197, Schulz does not disclose a solids sensor. However, Schulz does disclose samples are taking to determine long term production characteristics (see col. 1, lines 11-20). As it would be advantageous to determine how much solids are the well fluids in order to properly operate the well, it would be obvious to one of ordinary skill in the art to further modify Schulz to have a solids sensor.

Referring to claim 199, Schulz discloses the assembly prevents the formation fluid from flowing to the earth's surface the formation fluid flows through the formation test assembly (see fig. 1c).

Referring to claim 200, Schulz discloses the formation test assembly is interconnected in a segmented tubular string (16,18).

Referring to claim 201, Schulz discloses the formation test assembly is interconnected in a continuous tubular string (see fig. 13, 500).

Referring to claim 202, Schulz discloses the test assembly is connected to a wireline (44).

Referring to claim 206, Schulz discloses a plug (42).

Referring to claim 207, Schulz discloses a sampler attached to the plug (see col. 14, lines 59-63).

Referring to claim 208, Schulz discloses a packer (20).

Referring to claim 212-214, Vaynshteyn teaches an electrically operated valve (70) for selectively controlling flow of formation fluid.

Referring to claim 216, Schulz discloses a pressure differential exists from the first zone to the first chamber portion, and the pressure differential inducing the formation fluid to flow from the first zone into the first chamber portion (see col. 11, lines 22-26).

3. Claims 193,198, 209 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz et al. (5,540,280) in view of Vaynshteyn (6,173,772) as applied to claims 187 and 192 above, and further in view of Ringgenberg et al. (5,799,733).

Referring to claims 193 and 209, Schulz, as modified, does not disclose the indication of a fluid property is transmitted to a remote location using a line. Ringgenberg teaches transmitting a fluid property from a formation tester to a remote location (see col. 5, lines 37-40). Ringgenberg further teaches using a line to send information to remote location, (see col. 11, lines 64-67). This allows the well operators to have real time information of the sample fluid. As it would be advantageous for the well operators to have real time information to make decisions concerning the well, it would be obvious to one of ordinary skill in the art at the time of the

invention to further modify the apparatus disclosed by Schulz to send information to a remote location as taught by Ringgenberg.

Referring to claim 198, Schulz, as modified, does not disclose a fluid density sensor. Ringgenberg teaches a formation tester that uses a fluid density sensor to help determine if gas is in the sample (see col. 16, lines 27-32). As it would be advantageous to the well operator to know if gas is sample which may result in a well control problem, it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus disclosed by Schulz to have a fluid density sensor as taught by Ringgenberg.

4. Claims 209-211 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz et al. (5,540,280) in view of Vaynshteyn (6,173,772) as applied to claim 187 above, and further in view of Hrametz et al. (5,934,374).

Schulz does not disclose a line providing communication between the test assembly and the remote location. Schulz does a wire line (44). Hrametz teaches a wireline can be used to used to provide communication between a tester and a remoter location (see col. 3, lines 51-59). As it would be advantageous for the well operators to have real time information to make decisions concerning the well, it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus disclosed by Schulz to send information to a remote location as taught by Hrametz.

Referring to claim 210, Hrametz discloses the line is a fiber optics line (see col. 3, line 54).

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Referring to claim 211, Hrametz discloses the line transmits commands from the remote location (see col. 3, lines 51-55).

5. Claims 215 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz et al. (5,540,280) in view of Vaynshteyn (6,173,772) as applied to claim 212 above, and further in view of Tolley (4,662,391).

Schulz, as modified does not discloses a choke. Tolley discloses a valve or a choke can be used to control the flow of a fluid. As it would be advantageous to have a apparatus to control the amount of fluid entering the system (see col. 1, lines 19-20), it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the system disclosed by Schulz to have a choke as taught by Tolley.

Allowable Subject Matter

6. Claims 203-205 and 217-221 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 6:30-3 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gmc


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